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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/673,823

09/30/2003

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Q76760

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23373 7590 08/20/2007
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EXAMINER

HAN, QI

ART UNIT

PAPER NUMBER

2626

MAIL DATE

DELIVERY MODE

08/20/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/673,823	Applicant(s) MEYER, JOERG	
	Examiner Qi Han	Art Unit 2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 June 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>06/08/2007</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Information Disclosure Statement

2. The references listed in the Information Disclosure Statement submitted on 06/08/2007 and 01/18/2005 have been considered by the examiner (see attached PTO-1449).

Response to Amendment

3. This communication is responsive to the applicant's amendment dated 06/08/2007. The applicant(s) amended claims 1, 5 and 8, and added new claims 16-19 (see the amendment: pages 2-5).

The examiner withdraws the rejection of claim 5 under 35 USC 112 2nd, because the applicant amended the claim.

Response to Arguments

4. Applicant's arguments filed on 06/08/2007 with respect to the claim rejection under 35 USC 102/103, have been fully considered but are moot in view of the new ground(s) of rejection, since the amended claims introduce new issue and/or change the scope of the claims. Even though the applicant amended independent claims and the arguments are based on the newly

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amended claims, the previous cited references are still applicable to the amended claims for the prior art rejection (see detail below).

In response to applicant's arguments with respect to claim 1 (also related to claims 8) that “the combined disclosures of Kist and Morgan do not disclose or even remotely suggest inputting function and parameters separately, where the verbal input of the function is acknowledged via manual input”(REMARKS: page 9, paragraph 2), “Morgan, however, clearly teaches away from having manual confirmations”(REMARKS: page 10, paragraph 2), “Morgan does not disclose or even remotely suggest inputting via speech the parameters and commands separately” and “does not disclose or even remotely suggest acknowledging via manual input receipt of function, and only after the acknowledgement receiving the parameters”, the examiner respectfully disagrees with applicant’s argument and has a different view of the combined prior art teachings and the claim interpretations.

It is noted that KIST discloses all limitations except expressly disclosing entering parameters **after** “**acknowledging** the verbal input of the function of the instruction **via the manual input**”. However, MORGAN teaches that ‘most current voice (speech) recognition systems provide some form of visual feedback which permits the user to confirm (acknowledge) that the computer understands his speech utterances’ and ‘at some stage, **the interactive user is required to make some manual input**’ (col. 2, lines 21-32), which clearly suggests that the system has capability of inputting via speech the parameters and commands separately. MORGAN further discloses providing ‘visual feedback’ in a ‘voice recognition system’ for ‘confirming the recognition of command’ (col. 2, lines 40-46); ‘user is capable of inputting visual information to the system through the keyboard or mouse (manual input) **in addition to**

speech input' (col. 4, lines 22-23); and 'the visual feedback of displayed commands' (col. 4, lines 47-64), which further suggests that the system has capability of interactively using spoken and/or manual input for entering command (function) and the corresponding parameter(s) as claimed. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify KIST by providing some manual input, such as confirmation or acknowledgement, at some stage of user interaction with recognized speech system, as taught by MORGAN, so as to interactively use spoken and/or manual input for entering command (function) and then entering corresponding parameter(s), for the purpose (motivation) of handling possible recognition errors and/or conforming the accuracy of spoken commands (MORGAN: col. 2, lines 17-18 and 40-41).

Further, it is noted that both references disclose using speech/voice recognition feature for inputting speech/voice command with parameters, and both system include keyboard that the allows user to enter the textual instruction/command by typing. One of ordinary skill in the art would know that when **typing** textual instruction/command, a system would require to type "space" key or "enter" key to separate a command (function) and its parameters, and when **speaking** the same instruction/command, the system with speech recognition feature (such as used in the references) should automatically and inherently recognize the separations between spoken command word and its parameter words as the similar functionality of "space"/"enter" key in typing. Therefore, it would have been obvious to one of ordinary skill in the art to recognize that the automatic speech recognition system might make errors or encounter uncertainties, so that using some interactive user manual input in addition to speech input (such as typing on keyboard) would be helpful for the correction and conformation purpose as

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suggested by MORGAN (see above). Thus, one of ordinary skill in the art could use the combined system to enter speech command first, and then confirm it by typing "space"/"enter" key, and then enter spoken parameters, wherein typing "space"/"enter" key would be the same as inputting textual command by typing.

Finally, it is noted that the claimed/argued limitation is nothing more than using spoken word/text input for entering command and its parameter(s) and using manual input for separating the word/text. One of ordinary skill in the art would recognize that this type of separate entering is backward feature or technique, since both references teach that the command and its parameter(s) can be automatically recognized together for normal operation, thus the backward feature is not necessary for entering every commands (including the corresponding parameters) except that the possible errors or confirmations occur (as stated above). This should not be interpreted that one of ordinary skill in the art could not implement the feature for entering every commands as claimed/argued. In contrary, based on the combined teachings of the references as state above, one of ordinary skill in the art would recognize that implementing this backward feature (or technique) for entering every commands/parameters is easier than implementing automatic recognition for both spoken command and its parameters, because the speech recognition only need process single word each time and the separation only need manual input, like typing "space"/"enter" key as in textural input. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of KIST and MORGAN by implementing the backward feature of entering every spoken command and its parameters separated by a manual input, such as using signal word for recognition and tying "space" key for separation, for offering simpler and less input error system.

For above reason(s), the applicant's arguments are not persuasive.

Claim Rejections - 35 USC § 103

5. Claims 1-2 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over KIST et al. (US 6871179 B1) hereinafter referenced as KIST in view of MORGAN et al. (US 6937984 B1) hereinafter referenced as MORGAN.

As per **claim 1**, KIST discloses 'method and apparatus for executing voice commands having dictation as a parameter' (title), comprising:

"entering the function of the instruction as a verbal input via the voice recognition system" (col. 2, lines 56-63, 'receiving (entering) a user input corresponding to the spoken utterance (verbal input)', 'this input is processed to identify a pattern of word formatting the spoken utterance which matches a predetermined command pattern (function)');

"[after said acknowledging,] entering the parameters of the instruction as a further verbal input via the voice recognition system" (col. 2, lines 65-68, 'the one or more parameters are extracted from words contained in a dictation portion of the voice command').

KIST does not expressly disclose entering parameter after "**acknowledging** the verbal input of the function of the instruction **via the manual input**". However, this feature is well known in the art as evidenced by MORGAN who, in the same field of endeavor, discloses 'speech command input recognition system for interactive computer display with speech controlled display of recognized commands' (title), teaching that 'most current voice (speech) recognition systems provide some form of visual feedback which permits the user to confirm (acknowledge) that the computer understands his speech utterances' and 'at some stage, the

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interactive user is required to make some manual input' (col. 2, lines 21-32); providing 'visual feedback' in a 'voice recognition system' for 'confirming the recognition of command' (col. 2, lines 40-46); 'user is capable of inputting visual information to the system through the keyboard or mouse (manual input) in addition to speech input' (col. 4, lines 22-23); and 'the visual feedback of displayed commands' (col. 4, lines 47-64), which suggests the system has capability of interactively using spoken and/or manual input for entering command (function) and the corresponding parameter(s) as claimed. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify KIST by providing some manual input, such as confirmation or acknowledgement, at some stage of user interaction with recognized speech system, as taught by MORGAN, so as to interactively use spoken and/or manual input for entering command (function) and the corresponding parameter(s), for the purpose (motivation) of handling possible recognition errors and/or conforming the accuracy of spoken commands (MORGAN: col. 2, lines 17-18 and 40-41).

As per **claim 2** (depending on claim 1), the rejection is based on the same reason described for claim 1, because the rejection for claim 1 covers the same or similar limitation(s) as claim 2.

As per **claim 8**, it recites computer system. The rejection is based on the same reason described for claim 1, because the claim recites the same or similar limitation(s) as claim 1, except the limitation "a computer; a display screen connected to the computer to display information, a microphone connected to the computer, and a manual input provided at least in a vicinity of the display screen and connected to the computer". However, these features are further disclosed by KIST (Fig. 1, blocks 10, 26, 22, 18 and 20).

6. Claims 3-5, 16 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over KIST in view of MORGAN as applied to claim 1, and further in view of CHAVES (US 6510414 B1).

As per **claim 3** (depending on claim 2), even though KIST in view of MORGAN discloses that 'the parameter' from 'the spoken utterances' is 'separate from the pattern of words matching the command pattern' (KIST: abstract), and providing 'manual input' for confirming (acknowledging) (MORGAN: see claim 1), KIST in view of MORGAN does not expressly disclose "separate function and parameter keys... to acknowledge the verbal input... respectively". However, the feature of a function key associated with certain data entry is well known in the art as evidenced by CHAVES who, in the same field of endeavor, discloses 'speech recognition assisted data entry system and method' (title), teaching that 'speech recognition system may highlight the (recognizable) characters corresponding to a specific data entry field', 'a function key may be associated with a particular data entry field data entry application' in a speech recognition system (col. 5, lines 51-56); and providing activating/deactivating speech recognition and providing functionality of 'edit characters input into data entry application (manual input)' (Fig. 3, locks 124-130). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to recognize that additional function key(s) is/are available on a computer keyboard for entering different input information and/or triggering some event (such as inputting data and/or activating/deactivating mode), and to modify KIST in view of MORGAN by providing a function key associated with a particular data entry field, as taught by CHAVES, for the purpose (motivation) of increasing accuracy and

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flexibility for a speech recognition assisted data entry system (CHAVES: col. 1, lines 67 to col. 2, line 4).

As per **claim 4** (depending on claim 3), the rejection is based on the same reason described for claim 3, because the rejection for claim 3 covers the same or similar limitation(s) as claim 4, wherein it would have been obvious to one of ordinary skill in the art at the time the invention was made to recognize that additional function key(s) is/are available on computer keyboard and used for entering different information, as state above, including acknowledging multiple parameters.

As per **claim 5** (depending on claim 3), the rejection is based on the same reason described for claim 3, because the rejection for claim 3 covers the same or similar limitation(s) as claim 3, wherein it would have been obvious to one of ordinary skill in the art at the time the invention was made to recognize that a specific key (parameter key), such as “space” key, “enter” key or different function keys can be used multiple times or separately for different parameters.

As per **claim 16** (depending on claim 1), the rejection is based on the same reason used for claim 5, because it also reads on the limitation(s) of claim 16.

As per **claim 19** (depending on claim 1), the rejection is based on the same reason used for claims 3 and 5, because the rejection of claims 3 and 5 includes the same or similar’ limitations as claim 19. In addition, ‘the pre-determined command pattern’ and ‘the one or parameters’ extracted ‘from words... matching the command pattern’ disclosed by KIST (col. 2, lines 63-66) is broadly read on the claimed “correlating the entered function...” and “determining format for the parameters...”

7. Claims 6-7, 9-11 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over KIST in view of MORGAN as applied to claims 1 and 8, and further in view of L'ESPERANCE (US 2002/0055844 A1) hereinafter referenced as L'ESPERANCE.

As per **claim 6** (depending on claim 1), KIST in view of MORGAN does not expressly disclose "an operator screen is provided that overlays keys for the manual input utilizing a software program". However, the feature of a function key associated with a particular data entry field is well known in the art as evidenced by L'ESPERANCE who, in the same field of endeavor, discloses 'speech user interface for portable personal devices' (title), comprising 'PDA (personal digital assistant)' including 'automatic speech recognition module to provide dynamic response and feedback to the user's commands' and 'support visual display of any spoken information' (paragraph (hereinafter referenced as p)14); providing 'touch screen' (p55-59); 'interface display (operator screen)' including options of 'speech preferences menu', 'entries may be done with a virtual keyboard using a stylus' (p67); which necessarily and/or inherently includes overlaying keys and using software program as claimed. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify KIST in view of MORGAN by providing touch screen including virtual keyboard (including overlaying keys) for entering information, as taught by L'ESPERANCE, for the purpose (motivation) of supporting visual display of any spoken information (L'ESPERANCE: p14).

As per **claim 7** (depending on claim 1), the rejection is based on the same reason described for claim 6, because the rejection for claim 6 covers the same or similar limitation(s)

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as claim 7, wherein combined teachings with ‘the visual feedback of displayed commands’ (MORGAN: col. 4, lines 47-64) can be read on the claim.

As per **claim 9** (depending on claim 8), the rejection is based on the same reason described for claim 6, because the rejection for claim 6 covers the same or similar limitation(s) as claim 9, wherein ‘microphone module’ in the PDA disclosed by L’ESPERANCE (Figs. 1-2) can be read on the claim.

As per **claim 10** (depending on claim 8), the rejection is based on the same reason described for claim 6, because the rejection for claim 6 covers the same or similar limitation(s) as claim 9, wherein ‘virtual keyboard using a stylus’ on ‘the user interface display’ disclosed by L’ESPERANCE (p67) is read on the claimed “pressure sensitive foil applied to the display screen”.

As per **claim 11** (depending on claim 8), the rejection is based on the same reason described for claim 6, because the rejection for claim 6 covers the same or similar limitation(s) as claim 9, wherein ‘PDA’ disclosed by L’ESPERANCE can be read on the claimed “a manually operable mobile input unit”.

As per **claim 15** (depending on claim 11), the rejection is based on the same reason described for claim 9, because the claim recites the same or similar limitation(s) as claim 9.

8. Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over KIST in view of MORGAN and L’ESPERANCE as applied to claim 11, and further in view of WOODWARD (US 2002/0123893 A1).

As per **claim 12** (depending on claim 11), KIST in view of MORGAN and L'ESPERANCE does not expressly disclose "the mobile input unit is coupled with the computer via a cable". However, the feature is well known in the art as evidenced by WOODWARD who, in the same field of endeavor, discloses 'processing speech recognition errors in an embedded speech recognition system' (title), comprising 'the embedded speech recognition system (PDA or palm computer—corresponding to the mobile input unit) and the remote training system (corresponding to the computer) through communication link' including 'wireless or wireline technologies...such as infrared...Bluetooth,...direct cable' (Fig. 1 and p20). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify KIST in view of MORGAN and L'ESPERANCE by providing communication to a computer system through wireless or wireline, such as infrared or cable, as taught by WOODWARD, for the purpose (motivation) of processing and correcting speech misrecognitions by using suitable communications system (WOODWARD: abstract and p20).

As per **claim 13** (depending on claim 11), the rejection is based on the same reason described for claim 12, because the rejection for claim 12 covers the same or similar limitation(s) as claim 13.

As per **claim 14** (depending on claim 13), the rejection is based on the same reason described for claim 12, because the rejection for claim 12 covers the same or similar limitation(s) as claim 14.

9. Claims 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over KIST in view of MORGAN as applied to claim 1, and further in view of DORI (US 7,099,809 B2).

As per **claim 17** (depending on claim 1), even though KIST in view of MORGAN discloses that “the function of the instruction is a command” (see above), KIST in view of MORGAN does not expressly disclose the command “for creating or editing a portion of an electric analog circuit diagram”. However, the similar feature is well known in the art as evidenced by DORI who discloses ‘modeling system’ (title) for variety of applications (abstract), comprising ‘the received input’ and ‘the textual description’ generated ‘as a real-time response to user input manipulating, adding, or deleting (editing) graphic elements (include diagram)’, ‘using generated text to automatically generate software instructions (program) to implement the model or to provide a visual simulation of a modeled system’, ‘to receive a textural description of a model... generate (create) a model diagram’ (col. 1, line 5 to col. 2, line 40), and that ‘user can enter text into the script window by typing, using speech recognition...’ (col. 3, lines 28-29). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to recognize that textural instruction (command) recognized from speech command would be executed/operated in the same way as typed textural instruction does for whatever an application is required, and to modify KIST in view of MORGAN by providing instruction (command) for generating (create) related diagram(s) or editing graphic elements for variety of applications, as taught by DORI, for the purpose (motivation) of generating textual description of a graphic model and/or offering the techniques of generating graphic model (including diagram) in a wide variety of applications (DORI: abstract), wherein the applications would include the claimed functionality because in light of the disclosure of the specification, the claimed feature is nothing more than generating textual instruction(s) in the same way as typing textural instruction(s) for whatever the corresponding application is required.

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As per **claim 18** (depending on claim 1), the rejection is based on the same reason used for claim 17, because it also reads on the limitation(s) of claim 18.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Qi Han whose telephone numbers is (571) 272-7604. The examiner can normally be reached on Monday through Thursday from 9:00 a.m. to 7:30 p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil, can be reached on (571) 272-7602.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Inquiries regarding the status of submissions relating to an application or questions on the Private PAIR system should be directed to the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028 between the hours of 6 a.m. and midnight Monday through Friday EST, or by e-mail at: ebc@uspto.gov. For general information about the PAIR system, see <http://pair-direct.uspto.gov>.

QH/qh
August 14, 2007


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